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MATCH WITH FIG. 1A

V C I T L G I T S W T C G S L L A M V H  
610 630 650  
TGTGAGCCTCATCCTAAGACTGCCCTTTGTGGCCTCGTAAATCAACCACTTCTTCTG  
V S L I L R L P F C G P R E I N H F F C  
670 690 710  
TGAAATCCTGTCTGTCTCAGGCTGGCCTGTGCTGATACCTGGCTCAACCAAGGTGTCAT  
E I L S V L R L A C A D T W L N Q V V I  
730 750 770  
CTTTGaAGCCTGCATGTTTCATCCTGGTGGACCACTCTGCCCTGGTGGTCTCCTACTC  
F E A C M F I L V G P L C L V L V S Y S  
790 810 830  
ACACATCCTGGGGGCATCCTGAGGATCCAGTCTGGGAGGGCCGCAGAAAGCCCTTCTC  
H I L G G I L R I Q S G E G R R K A F S  
850 870 890  
CACCTGCTCCTCCACCTCTGCGTAGTGGGACTCTTCTTTGGSAGCGCCATCGTCATGTA  
T C S S H L C V V G L F F G S A I V M Y  
910 930 950  
CATGGCCCCTAAGTCCCGCCATCCTGAGGAGCAGCAGAAGTCCCTTTTCtTATTTTACA  
M A P K S R H P E E Q Q K V L F L I L Q  
970 990 1010  
GTTCCtTTTCAACCCCGATGcTTAAACCCCTGATTACAAACCCTGAGGAATGTAGAGGGT  
F L S T P M L K P P D L Q P \*  
1030 1050 1070  
CAaGggtGccCTCCGAGGAGACCAcTGtGCAARGRAAGTCAtTCCtAAGGGGTGTGACAT  
1090 1110 1130

MATCH WITH FIG. 1C



## FIG. 2A

10 30 50  
TCACTATAGGGCGGAATTGGGTACGGGCCCCCCCCCTCGAGGTCGACGGTATCGATAAGCTTG  
70 90 110  
ATATCGAATTTCGGCACGAGCCGGGCTCGGAGAGGTGACGGAACCGGGCTGGTAGCATAG  
130 150 170  
TTTGATTTGATGATGGAGCCAACACAGGGGTTGGAGCTGGTACCGGTGAAGCTGAGGCTA  
190 210 230  
AAAAGGTTCCCTGGAGTAGACGATGGAGCCATAACTGGAACCGGAGTCTGTGAATGAAGCC  
250 270 290  
AGGACAGGAGCAGCACCTGGCGATGGTGCCAGGACCGAAGAGGAGCCAGAGGAGGAGCT  
310 330 350  
GGAGAAGGAGCCAGAAATTGCTGTCTGTGGAGCCGCCCATAGGAGCCAGAGGGGTGGCTAGA  
370 390 410  
GCCTGAGAAATGCAGAAGATGCTGGAGCCAGAAAGGGAAGCCTGAGCTGGAGCTGGATTGTGG  
430 450 470  
TGCTGACGGAAAAGGACTGGCCAGAGCCGAAGCTGGCCACCAGGGACAGGTGAGCATTTCTG  
490 510 530  
GGGCCACGGTTGAGTTCAACCCACTGACTTCAGGTGAAGGACTGTGGACCAGCTTGAGAA  
550 570 590  
GAGGCCCTCACCCAGAGTGGGTGTGGGGCATGGGGGCTCGAGCAGTACCCAGAGTAGGTGTG  
610 630 650  
GGTAGCCCCGGCCAGGGGTTAACGTGGGGCGTGGATTCAACACAGCTTGGAAGCCCAGAGC  
670 690 710  
TCGGAGGCCCGGTGCTTGGGCCAATTGAGGAACAGGAGTCAGTCCATCCCGAGGGGGTT  
730 750 770  
GTCTCACTACAATCTTCACACGCCCTTTATTATTATTCACCATGGTTGGTGGCACCTGGTTAGC  
790 810 830  
AGCAAGCGGAAGGCTAGGCCCAGTAGGGGCAGGGGTGTTACTGGGGGTCTGAAGAAGCCAG

**MATCH WITH FIG. 2B**

# FIG. 2B

MATCH WITH FIG. 2A

850	CACAGACAGGGTAGGGCCAGGGGTGCGGGCCACGGCCTGGATGAGGCCACATGGGC	890
		M R P T W A
910	AGGCTGGCTGATGATGGTGTGCTGCCCCCTGCTGACACGAGGTGCACCATTCCTTTG	950
	G W L M R W C C P P A D T R C T T F L C	
970	CAGCGGGCGGCTGCCCCACAGCAAGCTGGCGCACCTGGGCACCATCCAAATACAGCTT	1010
	S G R A A P Q Q A G A P G H P K Y S L	
1030	GTTTCCCTGGATTGGAAGGTGAGAGGTTTGCTTCCCCCTCCATTAAACCACGTGTTGT	1070
	F P W I W K V R G L L P P L T T D V V	
1090	GCCAGTGAGACTAACTCTCCGCGCCAATCTGTCCGCGGCTGACCTCCTTCGCGGCGTGG	1130
	P V R L T L R A N L S A A D L L R G R G	
1150	CCTACCTCTTCCTCATGTTCCACACTGTCCCCCGCACAGCCCCGACTTTCACCTGAGGGCTG	1190
	L P L P H V P H C P R T A R L S L E G W	
1210	GTTCCCTGCGGAGGGCTTGCTGGACACAAACCTCACTGCGTCGGTGGCCACACTGCTGGC	1250
	F L R Q G L L D T N L T A S V A T L L A	
1270	CATCGCGGTGGAGCGGCACCGCAGTGATGGCCGTGCAGCTGCACAGCCGCTGCCCCG	1310
	I A V E R H R S V M A V Q L H S R L P R	
1330	TGGCCGCGTGTCATGCTCATTTGTGGCGGTGGTGGCTGCCCTGGGCGCTGGGGCTGCT	1370
	G R V V M L I V G V W V A A L G L G L L	
1390		1410 1430

MATCH WITH FIG. 2C

MATCH WITH FIG. 2B

Match with FIG. 2D

# FIG. 2D

MATCH WITH FIG. 2C

1870	1890	1910
ACTATACATCCTCTGCCCAGGAGGTGCCAGACTCGCATCATGCTTCCCGAGAACGGCC		
L Y I L C P G R C Q H S H A S R E R P		
1930	1950	1970
ACCCACTGATGGACTCCACCCTTTAGCTACCTTGAACCTACAGCGGTACGCGGCAAGCAAC		
P T D G L H P L A T L N Y S G T R Q A T		
1990	2010	2030
AAATCCACAGCCCTGATGACTTGTGGGTGCTCCTGGCTCAACCCAACTCGTGCCGAAT		
N P Q P L M T C G C S W L N P T S C R I		
2050	2070	2090
TCCTGCAGCCCGGGGATCCACTAGTTCTAGAGCGCGCCACCGGGTGGAGCTCCAGCT		
P A A R G I H *		
2110	2130	2150
TTTGTTCCTTTAGTGAGGGTTAATTTCGAGCCTTGGCGTAATCATGGTCATAGCTGTTC		
2170		
CTGTGTGAAATTGTTATCCGCTCAC		

# FIG. 3A

10 CGGCACGAGCATAAGAAGACAGAGAACTGAGTATCCTCCCAAAGGTGACACTGGAAGC 50  
 70 AATGAACACACACAGTAATGCAAGGCTTCAACAGATCTAAGCGGTGCCCCCAAAGACACTCG 110  
 M N T T V M Q G F N R S K R C P K D T R  
 130 GATAGTACAGCTGGTATTCACGCCCTCTACACAGTGGTTTCTTGACCGGAATCCTGCT 170  
 I V Q L V F P A L Y T V V F L T G I L L  
 190 GAATACTTTGGCTCTGTGGGTGTTTGTTCACATCCCCAGCTCCTCCACCTTCATCATCTA 230  
 N T L A L W V F V H I P S S S T F I I Y  
 250 CCTCAAAACACTTTGGTGGCCGACTTGATAATGACACTCATGCTTCTCCTTCAAATCCT 290  
 L K N T L V A D L I M T L M L P F K I L  
 310 CTCTGACTCACACCTGGCACCCCTGGCAGCTCAGAGCTTTGTGTGTCGTTTCTTCTCGGT 350  
 S D S H L A P W Q L R A F V C R F S S V  
 370 GATATTTATGAGACCATGTATGTGGGCATCGTGTGTTAGGGCTCATAGCCCTTGACAG 410  
 I F Y E T M Y V G I V L L G L I A F D R  
 430 ATTCCCTCAAGATCATCAGACCTTTGAGAAATATTTTCTAAAAAACCTGTTTGGGGAAA 470  
 F L K I I R P L R N I F L K K P V W G K  
 490 AACGGTCTCAATCTTCATCTGGTTCTTTTGGTCTCTCATCTCCCTGCCAAATATGATCTT 530  
 T V S I F I W F F F F I S L P N M I L  
 550 570 590

MATCH WITH FIG. 3B



# FIG. 3B

MATCH WITH FIG. 3A

GAGCAACAAGGAAGCAACACCATCGTCTGTGAAAGTGTGCTTCCTTAAAGGGCCTCT  
 S N K E A T P S S V K K C A S L K G P L  
 610 630 650  
 GGGGTGAAATGGCATCAAAATGGTAATAACATATGCCAGTTTATTTCTGGACTGTTT  
 G L K W H Q M V N N I C Q F I F W T V F  
 670 690 710  
 TATCCTAATGCTTGTGTTTATGTGGTTATTGCAAAAAGTATATGATTCTTATAGAAAG  
 I L M L V F Y V V I A K K Y M I L I E S  
 730 750 770  
 TCCAAAAGTAAGGACAGAAAAACAACAAAAGCTGGAAGGCAAGTATTTGTTGTCGTG  
 P K V R T E K T T K S W K A K Y L L S W  
 790 810 830  
 GCTGTCTTCTTTGTGTGTTTGTCTCCATTTCATTTCGCCAGAGTTCCCATATACTCACAGT  
 L S S L C V L L H F I S P E F H I L T V  
 850 870 890  
 CAAACCAACAATAAGACTGACTGTAGACTGCAAAATCAACTGTTTATGCTAAAGAAACA  
 K P T I R L T V D C K I N C L L L K K Q  
 910 930 950  
 ACTCTCTTTTGGCAGCAACTAACATTTGTATGGATCCCTTAATATACATATCTTATGT  
 L S F W Q Q L T F V W I P \*  
 970 990 1010  
 AAAAATTCACAGAAAAGCTACCATGTATGCAAGGGAGAAAGACCACGATCAAGCCAA  
 1030 1050 1070  
 GAAATCATAGCAGTCAGACAGACAACATAACCTTAGGCTGACAACACTGTACATAGGGGTA

MATCH WITH FIG. 3C

# FIG. 3C

Match with FIG. 3B

1090	1110	1130
ACTTCTATTATTGATGAGACTTCCCGTAGATAATGTGGAAATCCAATTTAACCACAGAAAA		
1150	1170	1190
AAAGATTGGGGCAAATGCTCTCTTACATTTTTATTATCCCTGGGTACAGAAAAAGATTATAT		
1210	1230	1250
AAAATTTAAATCCACATAGATCTATTTCATAAGCTGAATGAACCATTTACTAAGAGAATGCA		
1270	1290	1310
ACAGGATACAAAATGGCCACTAGAGGTCATTATTTCCTTCTTCTTTCTTTTCTTTT		
1330	1350	1370
AATTTCAAGAGCATTTCACTTTAACAATTTTGGAAAAGACTAAGGAGAAACGTATATCCCT		
1390	1410	1430
ACAAACCTCCCCCTCCAAACACCTTCTTACATCTTTTCCACAATTCACATAACACTACTG		
1450	1470	
CTTTTGTGCCCCCTTAAATGTAGATTGTGGCTG		



# FIG. 4B

MATCH WITH FIG. 4A

```

550      570      590
AAGAACCAAAAGAAATGCAAGAAATGTTTGCACTGGCGTGGTTAACTGTGATCGGAGG
R T K R N A K I V C T G V W L T V I G G
610      630      650
AAGTGCACCCCGCTTTTGTTCAGTCTACCCACTCTCAGGTAACAATGCCTCAGAAGC
S A P A V F V Q S T H S Q G N N A S E A
670      690      710
CTGCTTTGAAAAATTTCCAGAAGCCACATGGAAAAACATATCTCTCAAGGATTGTAATTT
C F E N F P E A T W K T Y L S R I V I F
730      750      770
CATCGAAATAGTGGGATTTTATTCCTCTAAATTTTAAATGTAACCTGTTCTAGTATGGT
I E I V G F F I P L I L N V T C S S M V
790      810      830
GCTAAAAACTTTAACCAACCTGTTACATTAAGTAGAAGCAAAATAAACAACTAAGGT
L K T L T K P V T L S R S K I N K T K V
850      870      890
TTTAAAAATGATTTTGTACATTTGATCATATCTGTTCTGTTTGTCTTCTTACAATAT
L K M I F V H L I I F C F C F V P Y N I
910      930      950
CAATCTTATTTATATTCCTTGTGAGAACACAAACATTTGTTAAATGCTCAGTAGTGGC
N L I L Y S L V R T Q T F V N C S V V A

```

MATCH WITH FIG. 4C

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**Match with FIG. 4B**

970 990 1010  
 AGCAGTAAGGACAATGTACCCCAATCACTCTCTGTATTGCTGTTTCCAACCTGTTGTTTGA  
 A V R T M Y P I T L C I A V S N C C F D 1070  
 1030 1050  
 CCTTATAGTTTACTACTTTACATCGGACACAAATTCAGAATTCATAAAATGAAAAAAGCTG  
 P I V Y Y F T S D T I Q N S I K M K N W 1130  
 1090 1110  
 GTCTGTCAGGAGAAGTGACTTCAGATTCTCTGAAGTTCATGGTGCAGAGAATTTTATTCA  
 S V R R S D F R F S E V H G A E N F I Q 1190  
 1150 1170  
 GCATAACCTACAGACCTTAAAAAGTAAGATATTTGACAAATGAATCTGCTGCCTGAAATAA  
 H N L Q T L K S K I F D N E S A A \* 1250  
 1210 1230  
 AACCATTAGGACTCACTGGGACAGAACTTTTCAAGTTCCTTCAACTGTGAAAAGTGTCCTTT  
 1270 1290  
 TTGGACAAACTATTTTCCACCTCCAAAAGAAATTAAACACA

[illegible]

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114 ECLLLVMSYDRYVAICHPLRYFIIMTWKVCITLGITSWTCGSLAMVHV 163
|||||:||||| |||.|||::|||.|||::|:
51 ECLLLVMSYDRYVAICHPLRYSAIMSWRVCSTMAVTSWIIGVLLSLIHL 100

```

[illegible]

214 LCLVLVSYSHILGGILRIQSGEGRRKAFSTCSSHLCVVGLFFGSAIVMYM 263  
:::|||||. |||:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:  
151 FSSI VVSYACILGAILKIQSEEGQRKAFSTCSSHLCVVGLFYGT AIVMYV 200

264 APKSRHP EEQKVLF LILQFLS 285

$\begin{array}{c} \bullet \\ \bullet \bullet \\ \bullet \bullet \end{array}$ 
 $\begin{array}{c} \bullet \bullet \\ \hline \bullet \bullet \\ \hline \hline \end{array}$ 
 $\begin{array}{c} \bullet \\ \hline \hline \end{array}$ 
 $\begin{array}{c} \bullet \\ \hline \hline \end{array}$ 
 $\begin{array}{c} \bullet \bullet \\ \hline \bullet \bullet \\ \hline \end{array}$

201 GPRHGSPKEQKKYLLFHSLFN 222

# FIG. 6A

```

1 MRPTWAGWLM.RWCCPPADTRCTFL..CSGRAAPQQAGAPGHPKYSLF 47
  ||..... ::::: :: : . ::::: |...
1 MGPTSVPLVKAHRSSVSDYVNYDIIVRHNYTGKLNISADKENSIKLTSV 50

48 PWIW.....KVRGLLPPPLTTDVPVRLTLRANLSAADLLRGRGLPL 89
  ::: .||. |... ::::: :||. .||| | :..
51 VFILICCFIILENIFVLLTIWKTKKFRPMYYFIGNLALSDDLAVAYTA 100

90 PHVPHCPRTARLSLEGWFLRQGLDNTLTASVATLLAIAVERHRSVMAVQ 139
  : : | :|. .|||:| : ..|.||| .|||:|:|. ::: :.
101 NLLSGATTYKLTPAQWFLREGSMFVALSASFSLAIAIERYITMLKMK 150

140 LHSRLPRGRVVMLIVGVVVAALGLGLLPAHSHWHCLCALDRSSRMAPLLSR 189
  ||. . |:::|| :. || .||| :|:|:|:|:| : ||. :
151 LHNGSNNFRLLISACWVISLILGGLPIMGWNCISALSSCSTVLPYHK 200

```

MATCH WITH FIG. 6B

**MATCH WITH FIG. 5A**

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190 SYLAVWALSLLVFLLMVAVYTRIFFYVRRRVQMA..EHVSCHPRYRET 237
    |: . . |::| :| :|||: .|| | .|:: .::| .| .|
201 HYILFCTTVFTLLLSIVILYCRYSLVTRSRRLTFRKNISKASRSSE. 249
238 TSLVKTVVIILGAFVVCWTPGQVVLLD.GLGCESCNVLALEKYFLLLA 286
    ..|:||||:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|
250 NVALLKTVIIVLSVFIACWAPLFILLLLDVGCKVKTCDILFRAEYFLVLA 299
287 EPTSLVNAAVYSCRDAEMRRTFRRLLLRVPPVHPRVCPLYILCPGRCQ 336
    .| .|: :|. : ||||. || | |:::|:|.
300 VLNSGTNP IYTLTNKEMRRAFIR.....IMSCCKCP 331
337 HSHHASRERPPTDGLHPLATLNYSGTR.....QATNPQPLMTCCG 376
    :. |:: :|. :|:|:| :| :| :|:|:|:|:|:|:|:|
332 SGDSAGKFKRPI....IAGMEFSRKSNDSSHPQKDEGDNPETIMSSG. 375
377 SWLNPTS 383
    :|. .|
376 .NVNSSS 381

```



[illegible]

6 SSHCFYNDSFKYTYLYGCMFSMVFLGVISNCVAIYIFICVLKVRNETTTYMINLAMSDDL 65  
SS+C DSFKYTYLYGC+FSMVFLG+I+NCVAIYIF LKVRNETTTYM+NLA+SDLL

3 SSNCSTEDSFKYTYLYGCVFSMVFLGLIANCVAIYIFFTTLKVRNETTTYMLNLAISDLL 62

66 FVFTLPFRIFYFTTRNWPFGDLLCKISVMLFYTNMYGSILFLTCTCISVDRFLAIVYPFKSK 125  
FVFTLPFRI+YF RNWPFGD+LCKISV LFYTNMYGSILFLTCTCISVDRFLAIV+PF+SK  
63 FVFTLPFRIYFVVRNWPFGDVLCKISVTLFYTNMYGSILFLTCTCISVDRFLAIVHPFRSK 122

126 TLRTKRNAKIVCTGVWLTVIGGSAPAVFVQSTHSQGNNAEACFFENFPEATWKTYLSRIV 185  
TLRTKRNA+IVC VW+TV+ GS PA F QST+ Q N CFENFPE+TWKTYLSRIV  
123 TLRTKRNARIVCVAVWITVLAGSTPASFQSTNRQNNTEQRTCFFENFPESTWKTYLSRIV 182

186 IFIEIVGFFIPLILNVTCSSMVLKTLTKPVTLSRSKINKTKVLKMFVHLIIFCFCFVPY 245  
IFIEIVGFFIPLILNVTCSS+MVL+TL KP+TLSR+K++K KVLKMFVHL+IFCFCFVPY  
183 IFIEIVGFFIPLILNVTCSTMVLRTLNKPVLTLSRNKLSKKKVLKMFVHLVIFCFCFVPY 242

246 NINLILYSLVRTQT FVNC SVVA VR TMYP ITLCIA VSNCCFDP I VYYFTSDTNSEFNKNE 305  
NI LILYSL+RTQT++NC SVV AVR TMYP+TLCIA VSNCCFDP I VYYFTSDTNSE +K +  
243 NITLILYSLMRQT WINC SVVT AVR TMYP VTLCIA VSNCCFDP I VYYFTSDTNSELDDKKQ 302

306 KL 307

+

303 QV 304

861